OGDEN ARSENAL, SERVICE MAGAZINE **HAER No. UT-84-AV**
(OGDEN ARSENAL, BUILDING 1948)
OGDEN ARSENAL, SCREENING & BLENDING BUILDING)
(OGDEN ARSENAL, EXPLOSIVE MACHINING & BREAK/SHOWER ROOM)
6459 North Loop
Layton Vicinity
Davis County
Utah

HAER
UTAH
6-LAY,V
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Denver, Colorado 80225-0287

HISTORIC AMERICAN ENGINEERING RECORD

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Location: 6459 North Loop, Hill Air Force Base, Layton Vicinity, Davis County, Utah

Note: For shelving purposes at the Library of Congress, Layton Vicinity in Davis County was assigned as the "official" location of Hill Air Force Base. Building 1948 is actually in the Ogden Vicinity of Weber County.

UTM: 12-414730-4556940

Date of Construction: 1942

Architect: Unknown

Builder: Unknown

Present Owner: Hill Air Force Base

Present Use: Explosive Machining & Break/Shower Room

Significance: Building 1948 housed the Tetryl screening and blending operations for 37mm anti-tank ammunition that was produced at Ogden Arsenal. The building provides particularly vivid images of the processes involved in the manufacture of munitions at Ogden Arsenal during World War II. This building, along with other structures at the base, renders a unique picture of the U.S. Army build-up which occurred on the eve of and during World War II.

History: Building 1948 housed the Tetryl screening and blending operations for 37mm anti-tank ammunition that was produced at Ogden Arsenal. Tetryl is a very powerful explosive that is commonly used in the manufacture of primary and secondary charges for blasting caps. Because of its very high melting point it was pressed into pellets rather than melted and cast. Before Tetryl could be pressed into pellets, it was screened and blended with graphite in Building 1948.

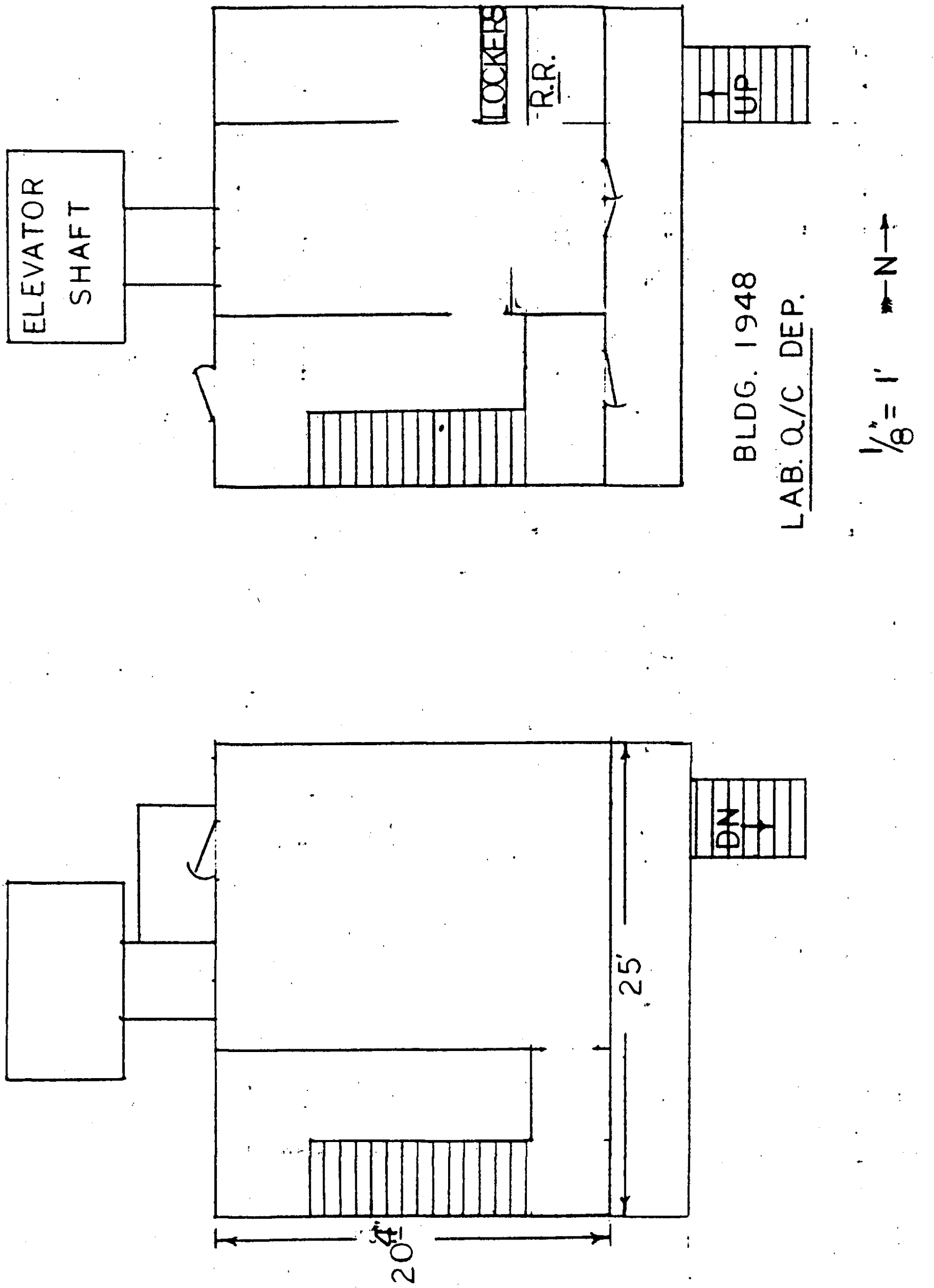
Building 1948 contained a screening room on the top floor and a blending room on the ground floor. These two levels were accessed by an indoor staircase area that also housed the equipment that powered the blending and screening machinery. An exterior safety chute was available for workers to escape from the second floor quickly in the event of an explosion. In 1955, an elevator shaft was added on the west facade and connected to the building by a covered walkway. It was separated from the main building in order to minimize its impact on the sensitive explosives that were handled inside.

Tetryl was transferred to the second floor of Building 1948 from a rest house in 50 lb. boxes. Two boxes were brought into the building at a time. Each box was weighed (57 lbs. gross/50 lbs. net per box) before it was opened and processed. The Tetryl case was opened with a non-sparking pinch bar, and then scooped out with copper scoops. The Tetryl was screened through an aluminum screen into a large rubber bucket, using copper scoops, until 100 lbs. (2 boxes) had been screened. This screened Tetryl was then was transferred to the first floor, where it was placed in a blender with graphite (100 lbs. Tetryl mixed with 1 lb. Graphite) for 30 minutes. The blended Tetryl was drawn from the blender into rubber cups (approx. 1 pt. = 1 lb per cup) that were then transferred to a rest house in wooden transfer boxes by means of an explosive transfer cart.

General Description: Building 1948 (24'-4" x 20'-4"), located in the original North Loading Plant Area, is a two-story, gable-roofed building. It is comprised of two sections: a two-story gabled portion and a shed-roofed elevator shaft to the west. The shaft (5' x 6') was added to the building in 1955 and is sheathed with corrugated "transite" (asbestos) siding. The shaft contains a one-story shed-roofed entry with a single door on the north side. The elevator is connected to the building by an open balcony with a gable roof. An emergency slide extends from the balcony to the ground on the north side. The main structure is framed in concrete, with a concrete wall separating the interior open stair from the screening rooms. The walls, like other "arsenal style" buildings, are infilled with red tile. Originally, the interior finish consisted of a linoleum floor and Keene's cement walls. The north and south elevations of the building each have a nine-pane hopper window on each floor. The roof extends to create a five-foot overhang on the east elevation which contains a balcony across the

length of the three-bay facade. The facade has a single door, double door, and window on both floors. The west elevation contains a double door to the balcony which connects to the elevator and two double-hung nine-pane windows on the second floor, with similar fenestration on the first floor of the east side.

Modifications to convert the building into a lunch/break area include the addition of lockers and showers on the second floor. The first floor now serves as the break room; the second floor is a dressing room area.


LOCKERS
R.R.
UP
ELEVATOR SHAFT
BLDG. 1948
LAB. Q/C DEP.
1/8" = 1'
N
DN
25'
20'